



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,193	10/31/2003	Davis-Dang Hoang Nhan	KCC 4984 (K-C 18,956)	3474
321	7590	10/02/2007	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			HAND, MELANIE JO	
			ART UNIT	PAPER NUMBER
			3761	
			NOTIFICATION DATE	DELIVERY MODE
			10/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

Office Action Summary

Application No.

10/699,193

Applicant(s)

NHAN ET AL.

Examiner

Melanie J. Hand

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 114 is/are pending in the application.
- 4a) Of the above claim(s) 15, 16 and 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17-21 and 114 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/20/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 20, 2007 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-14 and 17-21 have been considered but are moot in view of the new ground(s) of rejection.

As to applicant's argument that Hasse does not disclose that the backsheet is stretchable, this is not found persuasive because Hasse teaches in Col. 20, lines 56-59 that the backsheet 26 is comprised of thermoplastic films of polypropylene or polyethylene, which are elastomeric materials and are thus stretchable. As to applicant's argument that Hasse does not teach that the adhesive securing the superabsorbent core to the backsheet has a layer of particulate superabsorbent material applied to it, this too is found not persuasive. Hasse discloses in Col. 20, lines 20-25 that the backsheet 26 is joined to the absorbent core 28 by a uniform layer of adhesive. Superabsorbent core 28 is comprised of absorbent gelling materials (Col. 19, lines 26) or a combination of gelling materials and the other materials listed. Hasse does not insist upon a combination of gelling material with airfelt, thus applicant's argument that gelling material is not arranged in a layer when combined with airfelt is immaterial. Substantially all gelling materials are superabsorbent materials in the form of resin particles that gel upon

Art Unit: 3761

absorption of water. Thus Hasse teaches a layer of adhesive composition in contact with a stretchable substrate (backsheet 26) and a layer of particulate superabsorbent material (core 28) applied to and held by the adhesive composition. Hasse further teaches that the core 28 can be of many shapes and sizes, including rectangular. Clearly the absorbent core is not two-dimensional, thus the rectangular core 28 comprising solely absorbent gelling materials must have thickness and must necessarily constitute a layer. If superabsorbent gelling material is the only material present in the layer that is core 28, the Hasse necessarily teaches a layer of particulate superabsorbent gelling material remaining secured to the adhesive upon stretching. This is the very function and intent of adhesive-to retain a material in position on a substrate while the substrate is being moved, stretched, etc.

Applicants' arguments with regard to dependent claims 2-29 and 114 have been fully considered but are not persuasive as Applicants' arguments depend entirely on Applicants' arguments regarding the rejection of claim 1, which have been addressed *supra*.

As to applicant's additional arguments regarding claim 19, these arguments are not persuasive in view of Hasse's teaching that substrate 26 is comprised of thermoplastic polypropylene or polyethylene, which are elastomeric (i.e. elastic) materials.

As to applicant's additional arguments regarding claim 21, Hasse teaches a second layer of particulate superabsorbent because Hasse teaches that the core may comprise a combination of absorbent gelling materials (first SAP particulate) and superabsorbent polymers, substantially all of which are normally in particulate form, e.g. substantially spherical resin particles or fibers. Hasse further teaches that the core comprises one or more layers. (Col. 19, lines 29-34) Thus Hasse teaches a first layer of superabsorbent particulate and a second layer of SAP particulate, wherein the second layer of SAP particulate is applied to and held by a

Art Unit: 3761

second uniform layer of adhesive identical to that on backsheet 26 that secures the topsheet 24 to the core 28. (Col. 21, lines 9-14)

Applicant's arguments regarding new claim 114 are moot in view of the new grounds of rejection prompted by applicant's introduction of new claim 114.

It is noted that applicant did not address the grounds of rejection of 5-14 and simply included the rejections in the reference to dependent claims 2-29. Applicant is advised in future Office actions to address all grounds of rejection. See MPEP 2266.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasse et al (U.S. Patent No. 5,496,429).

With respect to **Claim 1**: Hasse teaches an absorbent article 20 comprising: a stretchable substrate 26 and an absorbent composite 28 comprising a layer of adhesive composition in contact with the stretchable substrate 26 and a layer of particulate superabsorbent material applied to and held by the adhesive composition, the absorbent composite 28 being secured to the substrate 26 by the adhesive composition. (Col. 20, lines 20-25)

With respect to **Claim 2**: Stretchable substrate 26 is a first stretchable substrate. Article 20 taught by Hasse further comprises a second stretchable substrate 24 in generally superposed

Art Unit: 3761

relationship with the first stretchable substrate 26 whereby the absorbent composite 28 is disposed between said first and second stretchable substrates 26,24, respectively. (Col. 20, lines 63-65, Col. 21, lines 9-14)

With respect to **Claim 3**: The layer of adhesive composition taught by Hasse is a first layer of adhesive composition, the absorbent article 20 further comprising a second layer of adhesive composition applied to the layer of particulate superabsorbent material defining composite 28. (Col. 21, lines 9-14)

With respect to **Claim 4**: The stretchable substrate 26 is a first stretchable substrate, the absorbent article 20 further comprising a second stretchable substrate 24 in generally superposed relationship with the first stretchable substrate 26 and secured to the second layer of adhesive composition to thereby secure the absorbent composite 28 to said second stretchable substrate 24. (Col. 21, lines 9-14)

With respect to **Claim 17**: Absorbent composite 28 further comprises hydrophilic fibers. (Col. 19, lines 17-32)

With respect to **Claim 18**: Absorbent composite 28 has a width and a length (Fig. 2), said absorbent composite 28 having a non-uniform basis weight across at least a portion of at least one of the width and the length of said absorbent composite 28. (Col. 19, lines 29-32)

With respect to **Claim 19**: Stretchable substrate 26 is elastic. (Col. 20, lines 48-53)

With respect to **Claim 20**: Stretchable substrate 26 defines an outer cover of the absorbent article 20, the absorbent article 20 further comprising a liquid permeable liner 24 in generally superposed relationship with the outer cover and adapted for contiguous relationship with the wearer's skin, the absorbent composite 28 being disposed between the liner 24 and the outer cover. (Col. 20, lines 63-65, Col. 21, lines 9-14)

With respect to **Claim 21**: The layer of adhesive composition taught by Hasse is a first layer of adhesive composition and the layer of particulate superabsorbent material is a first layer of particulate superabsorbent material, the absorbent article 20 further comprising a second layer of adhesive composition applied to the first layer of particulate superabsorbent material (on its topsheet-facing side), a second layer of particulate superabsorbent material included as part of the absorbent composite 28 being applied to and held by the second layer of adhesive composition. (Col. 20, lines 20-25, Col. 21, lines 9-14)

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 5-14 and 114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasse et al ('429) in view of Jiang et al ('614).

With respect to **Claim 5**: Hasse does not explicitly teach that the adhesive composition comprises a hot-melt adhesive. An absorbent article as set forth in claim 1 wherein the adhesive composition comprises a hot-melt adhesive. Jiang teaches an adhesive composition that is a

Art Unit: 3761

hot melt adhesive. Jiang teaches that said hot-melt composition has a long opening time at processing temperature and faster set time at lower temperatures ('614, ¶ 0107) therefore it would be obvious to one of ordinary skill in the art to modify the article of Hasse by substituting said adhesive composition with a hot melt adhesive composition as taught by Jiang such that the adhesive sets quickly at room temperature.

With respect to **Claims 6-10**: Jiang teaches that the adhesive composition has a viscosity less than 8,000 mPa-s (8,000 cP) at 190 degrees Celsius, therefore the viscosity will also be less than 10,000 cP at 204 (claim 6), 149 (claim 7) and 121 degrees Celsius (claim 8). Thus the adhesive composition will also have a viscosity at 149 degrees Celsius that falls within the range set forth in claim 9. With respect to claim 10, Jiang teaches that the viscosity could be less than 6,000 mPa-s (cP) at 190 degrees Celsius, which would also be less than 6,000 cP at 149 degrees Celsius and therefore falls within the range set forth in claim 10

With respect to **Claims 11-14**: Jiang teaches that the adhesive composition has a storage modulus of 0.001-1 Mpa ($10^5 - 10^7$ dynes/cm²) at 25 degrees Celsius.

With respect to **claim 114**: The adhesive composition of Jiang comprises at least one tackifier, said at least one tackifier comprising between 1-80 wt % of the blend (composition), which overlaps the claimed range of about 30 to about 65 percent by weight of the adhesive composition. The motivation to combine the teachings of Hasse and Jiang is stated *supra* with respect to claim 5.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand
Examiner
Art Unit 3761

September 25, 2007

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

